Biodiversity

Goal: Forest productivity is to be maintained in all harvest areas. Monitor the restocking of all lands that have received a regeneration harvest and determine if restocking has occurred within five years of final harvest.

Objective: Areas not adequately restocked with desirable tree cover within a five-year time frame are to be identified and action taken to see that failed areas are reforested. Changes in silvicultural practices may be necessary in these areas.

Background: Obtaining regeneration that meets the stocking guidelines and certification standards identified in the Silvicultural Practices Handbook (FSH 2409.17) is rarely a problem on stands receiving a regeneration harvest on the Tongass National Forest. Unpublished research and field observations indicate there are specific site conditions and opportunities that may indicate a need for artificial regeneration (this is usually planting and only rarely artificial seeding). Some situations to be particularly aware of are as follows:

- alluvial sites;
- cutover, open canopy, or sparsely stocked sites with an established ground cover of dense vegetation such as salmonberry, devils club, or grass;
- sites lacking a satisfactory seed source within approximately 660 feet from the center of the cutting unit;
- sites with lower productivity that presently have a plurality of cedar and in which there is a desire to retain a cedar component in the stand;
- stand compositions where change is needed, such as stands planned for harvest or already harvested where the adjacent seed source contains a high incidence of fluted hemlock;
- artificial regeneration is rarely needed and is prescribed on less than 5 percent of the harvested acres; and
- stands needing reforestation for other considerations, such as visually sensitive areas in which immediate regeneration through artificial reforestation would lessen the visual impact; or using genetically improved stock to increase the genetic makeup of the treated stand.

Biodiversity Question 1: Are harvested forested lands restocked within five years following harvest?

Annual Monitoring process:

All harvested lands are examined following treatment. Artificially seeded or planted areas are examined one and three years after treatment. Examination occurs three growing seasons after treatment in areas where it is anticipated that natural regeneration will be adequate. Stands are certified as stocked if the third growing season survey indicates that the areas meet stocking standards. Artificial regeneration is prescribed if the third-year survey indicates that natural regeneration is highly unlikely. A Forest Service Region 10 certified silviculturist recommends

Regeneration Certification for every unit harvested that meets or exceeds the Stocking Guidelines in the Silvicultural Practices Handbook - FSH 2409.17. Certification records are reported annually through the District Ranger to the Forest Supervisor. Certification records are kept in stand files at the Ranger Districts and in the Forest Service Activity Tracking System (FACTS) electronic database.

All stands harvested in 2007 were certified as restocked in FY2012 or an earlier fiscal year, with the exception of 120 acres that were harvested on the Juneau RD as a part of Right of Way (ROW) clearing in support of the Lake Dorothy Hydroelectric project. These acres were analyzed and Nepa cleared under the Lake Dorthy Hydroelectric project EA in 2006. They were analyzed and tracked in the FACTS database as permanent land clearing, with no intention of being certified as restocked. All lands harvested prior to FY2007 have also been certified as restocked.

Monitoring Results

2007 Harvests

Table 1. Status of Reforestation After Final Harvest FY 2007

Tongass Unit	Final Harvest Reported inFY 2007		% Adequately Stocked	Acres Not Adequately Stocked	% Not Adequately Stocked
Petersburg RD	326	326	100	0	0
Wrangell RD	643	643	100	0	0
Hoonah RD	55	55	100	0	0
Ketchikan-Misty RD	71	71	100	0	0
Juneau RD	120	0	0	120	100
Thorne Bay RD	33	33	100	0	0
Total	1248	1128	90%	120	10%

Evaluation of Results

The results show that 100 percent of forestland that was harvested in FY2007 and has been surveyed for natural regeneration was adequately restocked within five years. Although 90 percent of the total harvest was surveyed for natural regeneration, this is acceptable as 10 percent of the harvested acres were cleared with the intent of no regeneration. These acres are currently tracked in the FACTS database as 'permanent land clearing'. These acres were identified and nepa cleared in 2006.